

ENVIRONMENTAL PROTECTION AGENCY

2200 Churchill Road, Springfield, IL 62794-9276

Director

CONSTRUCTION PERMIT -- NSPS SOURCES

PERMITTEE

Wedron Silica Company
Attn: Edward J. Clements
Jackson and Walnut Streets
Wedron, Illinois 60557

Application No.: 94080140

Applicant's Designation: MOBILECRUS

Date Issued: October 11, 1994

Location: Jackson and Walnut Streets, Wedron

Subject: Sandstone Mining and Size Reduction

I.D. No.: 099804AAB

Date Received: August 31, 1994

Expiration Date: October 11, 1999

Permit is hereby granted to the above-designated Permittee to **construct** emission source(s) and/or air pollution control equipment consisting of one (1) crusher with spray bars, one (1) unloading hopper with spray bars, one (1) double deck screen, one (1) conveyor and one (1) slurry bin as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This Sandstone Crushing and Sizing Facility is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and OOO. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- bi. Fugitive emissions of particulate matter from the crushers (except from truck dumping), shall not exceed 15 percent opacity, (40 CFR 60.672(c) and (d)).
- ii. Fugitive emissions of particulate matter from grinding mills, screens (except from truck dumping), bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or rail car loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)).
- iii. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/ dscm (0.022 gr./dscf) and 7 percent opacity (40 CFR 60.672(a)).
- c. The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

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- d. The Permittee shall notify the Agency as required by 40 CFR 60.7, including:
- a. Commencement of construction
 - b. Anticipated date of initial startup
 - c. Actual date of initial startup
 - d. Expected date of commencing monitoring system performance demonstration.

2. This facility is limited to a maximum sand throughput to the crusher of 1000 tons per hour and 3,900,000 tons per year as described in the permit application. Maximum annual hours of operation for the crusher is limited to 3900 hours per year as requested in the permit application (maximums of 15 hours per day and five days per week).

3. This permit is based on a minimum aggregate moisture content of seven (7) percent or greater through out the total process. Water sprays will be used at the crusher and other necessary emission sources to reduce emissions of particulate matter and maintain the minimum seven (7) percent moisture level. Water sprays must be used when incoming material has a surface moisture level less than seven (7) percent. This is surface moisture is based on a one hour maximum drying time at 230 degrees F. Moisture levels should be tested and recorded twice daily.

4. Emissions and operation of equipment shall not exceed the following limits:

<u>Equipment</u>	<u>Emission Factors</u> <u>pound per ton</u>	<u>Particulate Matter</u> <u>pound per hour</u>	<u>Emissions</u> <u>ton per year</u>
Crusher with sprays	0.0180	18.0	45.0
Screens (2)-sprays	0.032	3.2	8.0
Hopper Loading - end loader-batch	0.056	6.0	15.0
Conveyor	0.029	2.9	5.66

Total = 73.66 tons per year

These limits are based on maximum sandstone crushing throughput rates, standard emission factors and procedures for sand and sandstone processes, and the information provided in the permit application.

5. This permit is issued based upon negligible emissions of organic material from storage tanks. For this purpose emissions shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year per tank.

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6. Compliance with annual limits shall be determined from a running total of twelve (12) months of data.
7. The Permittee shall keep all records necessary to demonstrate compliance with the conditions set forth in this Construction Permit and all NSPS requirements. These records include, but are not limited to, all records necessary to demonstrate compliance with the special conditions as outlined above and individual records on each NSPS subject emissions unit.
 - i. The Permittee shall maintain records of the occurrence and duration of any malfunction of equipment which results in emissions in excess of applicable standards, pursuant to 40 CFR 60.7(b).
 - ii. The Permittee shall keep all records required by this permit special condition at a readily accessible location at the plant for a period of three (3) years and make them available for inspection and copying by the Agency upon request.
8. Performance tests shall be conducted within 60 days after each source achieves maximum production, but not later than 180 days after initial startup, using the methods specified in 40 CFR 60.675.
9. Any required reports and notifications concerning equipment operation and /or testing shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
425 First Street
Lasalle, Illinois 61301
10. A Fugitive Dust operating program for roadways, parking lots, stockpiles, adjacent to stockpile working areas, and other fugitive emission sources shall be submitted to the Agency within 120 days of the issuance of this permit. Failure to do so will result in withdrawal of this permit.
11. All the above listed equipment and processed material stockpiles are limited to the Wedron plant location as designated in this permit application. Any movement of this equipment to a new site makes this permit null and void.
12. Any movement of this equipment at the same site but to a different area of the site requires a revised plot plan for this permit.

OPERATING PERMIT APPLICATION ANALYSIS

Applicant requests a construction permit

PERMITTEE

Wedron Silica Company
Attn: Edward J. Clements
Jackson and Walnut Streets
Wedron, Illinois 60557

1-800-255-7263

Application No.: 94080140

I.D. No.: 099804AAB

Applicant's Designation: MOBILECRUS

Date Received: August 31, 1994

Date Issued: October 11, 1994

Location: Jackson and Walnut Streets, Wedron

Subject: Sandstone Mining and Size Reduction

Flags: Old 1986 flag is for coal ash-J. Krolac contacted. OK but be sure NSPS and add movement statement - plotplan.

DATA:

The applicant requests an operating permit for one crusher to crush sand stone. Other equipment includes a double deck screen, one conveyor, one hopper, and a front end loader for mined material to hopper transfer. The material is mined via blasting. The crushed and sized material is transferred to the main plant as a slurry. The applicant requested new limestone emission factors for a sand and gravel operation. Older sand factors were used from AP-42.

EMISSIONS:

See attached computer sheets.

		pounds per hour	tons per year
crusher	max.	18.0	45.0
	avg.	13.5	21.1
batch drop hopper	max.	6.0	15.0
	loading avg	4.5	7.02
conveyor	max	2.9	5.66
	avg.	0.26	0.39
dbl. deck screen	max.	3.2	8.0
	avg.	2.4	3.7
total max		27.5	23.85

OK to GRANT

Mark Allen Martin, Sr.
October 11, 1994

CRUSHER1.XLS

This sheet can be used for general rock crushing and limestone manufacturing operations.				
Wedron Silica				
Emissions From Rock Crushing Operations Emission Factor Source: AP-42, Section 8.19				
Data From Application:				
Avg. hours/day:	12			
Avg. days/week:	5			
Avg. weeks/year:	52			
Max. hours/day:	15			
Max. days/week:	5			
Max. weeks/year:	52			
Are spray bars used?	no			
Is The Moisture Content Greater Than 1 %?	YES			
Claimed Control Efficiency Due to Moisture (%)	90.0			
Is this a limestone manufacturing facility?	No			
Process Data:				
Average operating hours (hrs/yr):	3120			
Maximum operating hours (hrs/yr):	5000			
Primary Crusher #1:				
Avg. Process Weight Rate (tons/hour):	750			
Max. Process Weight Rate (tons/hour):	1000			
Primary Crusher #1 E.I.S. data:				
SCC Number:	30502001			
Average operating rate:	750			
Maximum operating rate:	1000			
Calculated Particulate From Crusher #1:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	13.5	21.1	18.0	45.0
PM-10:	0.0	0.0	0.0	0.0

CRUSHER1.XLS

Allowed Particulate From Crusher #1: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	71.5	111.6	74.9	187.2
<u>Primary Crusher #2:</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Primary Crusher #2 E.I.S.data:				
SCC Number:	30502001			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Crusher #2:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
PM-10:	0.0	0.0	0.0	0.0
Allowed Particulate From Crusher #2: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<u>Secondary Crusher #1:</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Secondary Crusher #1 E.I.S.data:				
SCC Number:	30502002			
Average operating rate:	0			

CRUSHER1.XLS

Maximum operating rate:	0			
Calculated Particulate From Crusher #1:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
PM-10:	0.0	0.0	0.0	0.0
Allowed Particulate From Crusher #1:				
(35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Secondary Crusher #2:				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Secondary Crusher #2 E.I.S.data:				
SCC Number:	30502002			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Crusher #2:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
PM-10:	0.0	0.0	0.0	0.0
Allowed Particulate From Crusher #2:				
(35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Secondary Crusher #3:				

CRUSHER1.XLS

Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Secondary Crusher #3 E.I.S.data:				
SCC Number:	30502002			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Crusher #3:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
PM-10:	0.0	0.0	0.0	0.0
Allowed Particulate From Crusher #3: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<u>Tertiary Crusher #1:</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Tertiary Crusher #1 E.I.S.data:				
SCC Number:	30502003			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Crusher #1:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Allowed Particulate From Crusher #1:				

CRUSHER1.XLS

(35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<u>Tertiary Crusher #2:</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Tertiary Crusher #2 E.I.S.data:				
SCC Number:	30502003			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Crusher #2:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Allowed Particulate From Crusher #2: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<u>Wet Quarry Drilling:</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Wet Quarry Drilling E.I.S.data:				
SCC Number:	30502010			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Drilling:				

CRUSHER1.XLS

	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.00	0.00	0.00	0.00
PM-10:	0.00	0.00	0.00	0.00
Allowed Particulate From Drilling: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Truck Unloading:				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Truck Unloading E.I.S. Data:				
SCC Number:	30502031			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Unloading:				
		0		
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.00	0.00	0.00	0.00
PM-10:	0.00	0.00	0.00	0.00
Allowed Particulate From Unloading: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Truck Loading (conveyor):				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			

CRUSHER I.XLS

Truck Loading E.I.S. Data:				
SCC Number:	30502032			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Loading:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.00	0.00	0.00	0.00
PM-10:	0.00	0.00	0.00	0.00
Allowed Particulate From Loading:				
(35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<i>Hopper</i>				
Truck Loading (end loader):				
Avg. Process Weight Rate (tons/hour):	750			
Max. Process Weight Rate (tons/hour):	1000			
Truck Loading E.I.S. Data:				
SCC Number:	30502033			
Average operating rate:	750			
Maximum operating rate:	1000			
Calculated Particulate From Loading:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	45.00	70.20	60.00	150.00
Allowed Particulate From Loading:				
(35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr

CRUSHER1.XLS

Total Particulate Matter:	71.5	111.6	74.9	187.2
<u>Conveyor #1 (tunnel belt):</u>				
Avg. Process Weight Rate (tons/hour):	750			
Max. Process Weight Rate (tons/hour):	1000			
Conveyor #1 E.I.S. Data:				
SCC Number:	30502006			
Average operating rate:	750			
Maximum operating rate:	1000			
Calculated Particulate From Conveyor #1:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	2.55	3.98	3.40	8.50
PM-10:	0.15	0.23	0.20	0.50
Allowed Particulate From Conveyor #1: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	71.5	111.6	74.9	187.2
<u>Conveyor #2 (tunnel belt):</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Conveyor #2 E.I.S. Data:				
SCC Number:	30502006			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Conveyor #2:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr

CRUSHER1.XLS

Total Particulate Matter:	0.00	0.00	0.00	0.00
PM-10:	0.00	0.00	0.00	0.00
Allowed Particulate From Conveyor #2: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<u>Conveyor #3 (tunnel belt):</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Conveyor #3 E.I.S. Data:				
SCC Number:	30502006			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Conveyor #3:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.00	0.00	0.00	0.00
PM-10:	0.00	0.00	0.00	0.00
Allowed Particulate From Conveyor #3: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
<u>Conveyor #4 (tunnel belt):</u>				
Avg. Process Weight Rate (tons/hour):	0			
Max. Process Weight Rate (tons/hour):	0			
Conveyor #4 E.I.S. Data:				

CRUSHER1.XLS

SCC Number:	30502006			
Average operating rate:	0			
Maximum operating rate:	0			
Calculated Particulate From Conveyor #4:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.00	0.00	0.00	0.00
PM-10:	0.00	0.00	0.00	0.00
Allowed Particulate From Conveyor #4: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	0.0	0.0	0.0	0.0
Screen #1:				
Avg. Process Weight Rate (tons/hour):	750			
Max. Process Weight Rate (tons/hour):	1000			
Screen #1 E.I.S. Data:				
SCC Number:	30502006			
Average operating rate:	750			
Maximum operating rate:	1000			
Calculated Particulate From Screen #1:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	12.00	18.72	16.00	40.00
PM-10:	9.00	14.04	12.00	30.00
Allowed Particulate From Screen #1: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr

CRUSHER1.XLS

Total Particulate Matter:	71.5	111.6	74.9	187.2
Screen #2:				
Avg. Process Weight Rate (tons/hour):	750			
Max. Process Weight Rate (tons/hour):	1000			
Screen #2 E.I.S. Data:				
SCC Number:	30502006			
Average operating rate:	750			
Maximum operating rate:	1000			
Calculated Particulate From Screen #2:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	12.00	18.72	16.00	40.00
PM-10:	9.00	14.04	12.00	30.00
Allowed Particulate From Screen #2: (35 Ill. Adm. Code 212.321)				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr
Total Particulate Matter:	71.5	111.6	74.9	187.2
Screen #3:				
Avg. Process Weight Rate (tons/hour):	200			
Max. Process Weight Rate (tons/hour):	0			
Screen #3 E.I.S. Data:				
SCC Number:	30502006			
Average operating rate:	200			
Maximum operating rate:	0			
Calculated Particulate From Screen #3:				
	Avg. Lb/Hr	Avg. Ton/Yr	Max. Lb/Hr	Max. Ton/Yr